FACT SHEET

The United States Environmental Protection Agency (EPA)
Plans To Reissue A
National Pollutant Discharge Elimination System (NPDES) Permit To:

The City of Sandpoint
1123 Lake Street
Sandpoint, Idaho 83864

Permit Number: ID-002084-2
Public Notice start date:
Public Notice expiration date:

EPA Proposes NPDES Permit Reissuance.
EPA proposes to reissue an NPDES permit to the City of Sandpoint. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to the Pend Oreille River. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged.

This Fact Sheet includes:
- information on public comment, public hearing, and appeal procedures
- a description of the current discharge and current sewage sludge (biosolids) practices
- a listing of proposed effluent limitations, schedules of compliance, and other conditions
- a map and description of the discharge location
- detailed technical material supporting the conditions in the permit

The State of Idaho Proposes Certification.
EPA is requesting that the Idaho Department of Environmental Quality certify the NPDES permit for the City of Sandpoint, under section 401 of the Clean Water Act. The state reviewed and provided comments on the preliminary draft permit. Those comments have been incorporated into the draft permit.

Public Comment.
Persons wishing to comment on or request a Public Hearing for the draft permit may do so in writing by the expiration date of the Public Notice. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for Public Hearings must be in writing and should be submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, and all comments have been considered, EPA's regional Director for the Office of Water will make a final decision regarding permit reissuance.

Persons wishing to comment on State Certification should submit written comments by the

Public Notice expiration date to the Idaho Department of Environmental Quality (IDEQ) at 2110 Ironwood Parkway, Coeur d'Alene, Idaho 83814. A copy of the comments should also be submitted to EPA.

If no substantive comments are received, the tentative conditions in the draft permit will become final, and the permit will become effective upon issuance. If comments are received, EPA will address the comments and issue the permit. The permit will become effective 30 days after the issuance date, unless a request for an evidentiary hearing is submitted within 30 days.

Documents are Available for Review.

The draft NPDES permit and related documents can be reviewed or obtained by visiting or contacting EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday (See address below). Draft permits, Fact Sheets, and other information can also be found by visiting the Region 10 website at www.epa.gov/r10earth/water.htm.

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, OW-130
Seattle, Washington 98101
(206) 553-2108 or
1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The Fact Sheet and draft permit are also available at:

EPA Idaho Operations Office
1435 North Orchard Street
Boise, Idaho 83706
(208) 378-5746

TABLE OF CONTENTS

I. APPLICANT

City of Sandpoint
NPDES Permit No.: ID-002084-2

Facility Mailing Address:
1123 Lake Street
Sandpoint, Idaho 83864

Facility Location:
723 S Ella Avenue
Sandpoint, Idaho 83864

II. FACILITY INFORMATION

A. Treatment Plant Description

The City of Sandpoint owns, operates, and has maintenance responsibility for a facility which treats domestic sewage from local residents and commercial establishments. The wastewater treatment system consists of storm water clarification, primary clarification, activated sludge, secondary clarification, and chlorination. The design flow for the facility is 3.0 mgd. The annual average daily flow rate over the past 12 months is 1.8 mgd during which the maximum daily flow rate was 6.4 mgd.

The following is a description of the Sandpoint wastewater treatment plant process (flows are reported as maximum instantaneous). Influent wastewater enters the headworks, which consist of two comminutors and an aerated grit basin. Following the grit basin, flows greater than 9.8 mgd can be diverted to the storm water clarifier, followed by chlorination in the chlorine contact basin prior to discharge. Flows less than 9.8 mgd are split and pass though two primary clarifiers. Following primary clarification, flows greater than 4.8 mgd are diverted through a detention tank to the chlorine contact basin prior to discharge. Flows less than 4.8 mgd continue through secondary treatment. Secondary treatment consists of two parallel aeration basins, followed by two parallel secondary clarifiers, the chlorine contact basin, and discharge to the Pend Oreille River via a 36 inch diameter outfall and diffuser. Flows diverted to the storm water clarifier and the detention tank are combined with effluent from secondary treatment prior to chlorination and discharge through outfall 001.

B. Background Information

The most recent NPDES permit for the wastewater treatment plant was issued on November 1, 1993 and expired on November 2, 1998. An NPDES application for

permit reissuance was submitted by the city on May 1, 1998, and resubmitted to EPA with minor updates in September, 2000.

EPA conducted a review of the facility's Discharge Monitoring Reports[1] for the past two years and found that the facility has generally been in compliance with its permit effluent limits. In 1999 and 2000 the facility reported one exceedance of the monthly and weekly BOD loading limit, one pH exceedance, and two total residual chlorine concentrations in excess of permit limitations. The City of Sandpoint has had problems in the past with infiltration/inflow of stormwater into their collection system which has resulted in compliance problems. The City has initiated a number of efforts to address this problem which are discussed further in Appendix C. Recent Idaho DEQ and EPA inspection reports have also been reviewed. Inspectors generally found the plant well maintained, records in good order, and the facility to be in compliance with permit limits.

A map has been included in Appendix A which shows the location of the treatment plant and the discharge location.

III. RECEIVING WATER

A. Outfall Location/ Receiving Water

The City of Sandpoint discharges treated effluent throughout the year to the Pend Oreille River, approximately one mile downstream from the U.S. 95 Highway bridge. The outfall is approximately 925 feet from shore at a depth of 17 feet below the surface.

Determination of flow conditions in the receiving water are necessary to determine water quality impacts from the discharge. Statistical analysis of available flow information for this segment of the Pend Oreille River indicate a $7Q10$[2] flow of 3285 cfs (2123 mgd) and a $1Q10$[3] of 2292 cfs (1482 mgd). This information was obtained from Pend Oreille River USGS station number 12395500 located in Newport Idaho, down stream of Sandpoint, and USGS site 12395000, in the Priest River, which is a major contributor to the Pend Oreille between the facility and the Newport station. The flow from the Priest River station was subtracted from the flow from the Newport station in order to get the best estimate of flow at the discharge location in Sandpoint. The data evaluated

[1]Discharge monitoring reports are forms that the facility uses to report the results of monitoring the facility has done in compliance with their NPDES permit.

[2] The 7Q10 represents the lowest 7 day average flow that is expected to occur once in ten years.

[3] The 1Q10 represents the lowest daily flow that is expected to occur once in ten years.

consisted of daily flow measurements taken between 1953 and 1999.

B. Water Quality Standards

A State's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria, and an anti-degradation policy. The use classification system designates the beneficial uses (such as cold water biota, contact recreation, etc.) that each water body is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary, by the State, to support the beneficial use classification of each water body. The anti-degradation policy represents a three tiered approach to maintain and protect various levels of water quality and uses.

The Idaho *Water Quality Standards and Wastewater Treatment Requirements* (IDAPA 58.01.02.110.05.) protect the Pend Oreille River for the following beneficial use classifications: cold water communities, primary contact recreation, and domestic water supply.

The criteria that the State of Idaho has deemed necessary to protect the beneficial uses for the Pend Oreille River, and the State's anti-degradation policy are summarized in Appendix B to this fact sheet.

C. Water Quality Limited Segment

A water quality limited segment is any waterbody, or definable portion of water body, where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards. The Pend Oreille River was added to the Clean Water Act Section 303(d) list in 1996. The pollutants of concern are sediment, thermal modification and flow.

Section 303(d) of the Clean Water Act (CWA) requires States to develop a Total Maximum Daily Load (TMDL) management plan for water bodies determined to be water quality limited. A TMDL documents the amount of a pollutant a waterbody can assimilate without violating a state's water quality standards and allocates that load to known point sources and nonpoint sources.

In April 2000, the Idaho Department of Environmental Quality (IDEQ) submitted the *Clark Fork/Pend Oreille Subbasin Assessment and Total Daily Maximum Load*. This document discusses temperature, sediment, and flow in the Pend Oreille River. According to the document, temperature levels in the river are below the maximum criteria of 22°C but have been above the daily average criteria of 19°C. Temperature TMDLs have generally been deferred by the State pending additional study of the appropriate criteria for protection of aquatic life. Total suspended sediment and turbidity levels are low and currently supporting

designated uses. IDEQ does not recognize flow as a pollutant and it is not addressed in the document. The assessment points to the Albani Falls dam as the primary cause of sedimentation, due to de-stabilization of river banks from water level fluctuation, and flow modification due to the impoundment of water behind the dam. The assessment also points to the dam as contributing to temperature increases due to the retention of water upstream of the dam and an increase in lake surface area. Overall, the Subbasin Assessment does not include a TMDL or wasteload allocations for the Pend Oreille River and there are no requirements applicable to the discharges from the Sandpoint wastewater treatment plant discharge. Therefore, there are no TMDL based effluent limitations in the draft permit.

IV. EFFLUENT LIMITATIONS

In general, the Clean Water Act requires that the effluent limits for a particular pollutant be the more stringent of either technology-based effluent limits or water quality-based limits. A technology based effluent limit requires a minimum level of treatment for municipal point sources based on currently available treatment technologies. A water quality based effluent limit is designed to ensure that the water quality standards of a waterbody are being met. For more information on deriving technology-based effluent limits and water quality-based effluent limits see Appendix C. The following summarizes the proposed effluent limitations that are in the draft permit.

1. The pH range shall be between 6.5 - 9.0 standard units.

2. Removal Requirements for BOD_5 and TSS: For any month, the monthly average effluent concentration shall not exceed 15 percent of the monthly average influent concentration.

3. There shall be no discharge of floating solids or visible foam or oil and grease other than trace amounts.

4. Table 1, below, presents the proposed effluent limits for BOD_5, TSS, fecal coliform bacteria, escherichia (E. coli) bacteria, and total residual chlorine.

TABLE 1: Monthly, Weekly and Daily Effluent Limitations

Parameters	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit

BOD_5	30 mg/L (750 lbs/day)	45 mg/L (1100 lbs/day)	---
TSS	30 mg/L (750 lbs/day)	45 mg/L (1100 lbs/day)	---
Fecal Coliform Bacteria	---	200 colonies/100 ml	---
E. coli Bacteria	126 colonies/100 ml	---	406 colonies/100 ml
Total Residual Chlorine	0.45 mg/L	---	1.1 mg/L

V. PRETREATMENT PROGRAM REQUIREMENTS

In January 1984, the city submitted a formal pretreatment program application that met requirements of 40 CFR 403. This program was subsequently approved by EPA. The pretreatment requirements of the existing permit have largely been retained in the draft permit. Pretreatment implementation conditions include semi-annual sampling (three samples in a week) of the influent, effluent, and final sludge, a pretreatment annual report and program management requirements. The monitoring results are to be submitted as part of the annual pretreatment report.

The city's pretreatment program has been evaluated on an annual basis through on-site visits and review of the annual pretreatment report. During the term of the existing permit, EPA identified shortcomings in the city's implementation of its approved pretreatment program. Violations were identified in EPA's 1998 Administrative Compliance Order (Docket Number 10-98-0029-CWA-A). The order cited a lack of enforcement action consistent with the enforcement response plan for repeated violations by non-domestic users between 1993-1996. The Order also found the city issued inadequate discharge permits to industrial users. The Order required the city to pay a penalty of $5,900 and to buy at least 60 acres in the watershed for its drinking water supply to protect the quality of the municipal water supply.

VI. SLUDGE REQUIREMENTS

Sludge from the Sandpoint wastewater treatment plant is currently anaerobically digested and ultimately land applied on privately owned land. The existing 1993 NPDES permit contained biosolids requirements which have been eliminated from this proposed draft permit. The basis for this change is EPA Region 10's recent decision to separate wastewater and sludge permitting. Under the Clean Water Act (CWA), EPA has the authority to issue separate sludge-only permits for the purposes of regulating biosolids. EPA intends to issue a sludge-only permit to this facility at a later date.

Until the issuance of a sludge-only permit, the facility's sludge activities will continue to be subject to the national sewage sludge standards at 40 CFR Part 503 and any

requirements of the State's biosolids program. The Part 503 regulations are self-implementing, meaning that permittees must comply with them whether or not a permit has been issued. Therefore, the CWA does not require the facility to have a permit prior to use or disposal of biosolids.

The Part 503 regulations require that permittees have a current sludge application on file with the permitting authority. EPA has requested that the city update its sludge application.

VII. MONITORING REQUIREMENTS

Section 308 of the Clean Water Act and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality. The permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports to EPA.

The existing permit required effluent monitoring for parameters with effluent limitations as well as for nutrients (ammonia, nitrite, nitrate, TKN, total phosphorus, and dissolved orthophosphate on a quarterly frequency). The existing permit also required biomonitoring twice per year.

EPA proposes that the effluent monitoring for parameters with limitations continue at the same frequency as the existing permit in order to determine compliance with the limitations. EPA will also require E-coli monitoring for this newly limited parameter. Nutrients continue to be a concern in the Pend Oreille watershed so EPA proposes to continue the current frequency of four per year. The existing permit required biomonitoring, or whole effluent toxicity (WET) testing, be conducted quarterly over the term of the permit. The quarterly testing has not detected toxicity, therefore, EPA proposes to reduce WET testing frequency in the draft permit. The draft requires WET testing be conducted quarterly in the fourth year of the permit only, in order to gather information prior to the next permit reissuance. See Appendix C, Toxic Substances, for further discussion of WET testing. EPA has also included a new requirement to test the effluent for temperature since the receiving water is listed as impaired for this parameter.

Ambient monitoring is required in the draft permit in order to assist in determining the facility's impact on the receiving water for ammonia, nutrients, and metals. Temperature and pH will be gathered in order to determine the ammonia criteria for the receiving water. Ammonia and nutrients will be sampled to evaluate ammonia toxicity and nutrient concentrations which are a concern in the watershed. Hardness will be sampled in order to determine metal criteria in the receiving water. Flow will be sampled to assist in water-quality based permit evaluations in future permit issuances. All sampling will be done both upstream and downstream of the facility at locations approved by IDEQ. Sampling will be done monthly over a two year period. River samples shall be spatially

integrated grab samples.

Table 2 summarizes the proposed effluent monitoring requirements.

TABLE 2: City of Sandpoint Waste Water Treatment Plant Monitoring Requirements

Parameter	Sample Location	Sample Frequency	Sample Type
Flow, mgd	Influent or effluent	Continuous	Recording
$BOD_{5,}$ mg/L	Influent and effluent	3/week	24-hour composite
TSS, mg/L	Influent and effluent	3/week	24-hour composite
pH, standard units	Effluent	1/day	grab
Temperature, °C	Effluent	1/day	grab
Fecal Coliform Bacteria, colonies/100 ml	Effluent	3/week	grab
E. coli Bacteria, colonies/100 ml	Effluent	3/week	grab
Total Residual Chlorine	Effluent	1/day	grab
Total Ammonia as N, mg/L	Effluent	1/month	24-hour composite
Nitrate as N, mg/L	Effluent	1/quarter	24-hour composite
Nitrite as N, mg/L	Effluent	1/quarter	24-hour composite
Total Kjeldahl Nitrogen, mg/L	Effluent	1/quarter	24-hour composite
Total Phosphorus as P	Effluent	1/quarter	24-hour composite
Dissolved Orthophosphate as P	Effluent	1/quarter	24-hour composite
Nutrients, pH, temperature, hardness, flow	Ambient	monthly for a 2 year period	24-hour composite
Metals	Influent, effluent, sludge (pretreatment)	2/year	24-hour composite (sludge-grab)
Whole Effluent Toxicity	Effluent	4/year, fourth year of the permit only	24-hour composite

VIII. OTHER PERMIT CONDITIONS

A. Quality Assurance Plan

The federal regulation at 40 CFR 122.41(e) requires the permittee to develop and

submit a Quality Assurance Plan to ensure that the monitoring data submitted is accurate and to explain data anomalies if they occur. The permittee is required to complete a Quality Assurance Plan within 90 days of the effective date of the final permit. The Quality Assurance Plan shall consist of standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting.

B. Operations and Maintenance Plan

Section 402 of the Clean Water Act and federal regulations 40 CFR 122.44(k)(2) and (3) authorize EPA to require best management practices, or BMPs, in NPDES permits. BMPs are measures for controlling the generation of pollutants and their release to waterways. For municipal facilities, these measures are typically included in the facility's Operation & Maintenance (O&M) plan. These measures are important tools for waste minimization and pollution prevention.

The draft permit requires the City of Sandpoint to incorporate appropriate BMPs into its O&M plan within 180 days of permit issuance. Specifically, the permittees must consider spill prevention and control, optimization of chemical use, public education aimed at controlling the introduction of household hazardous materials to the sewer system, and water conservation. To the extent that any of these issues have already been addressed, the permittees need only reference the appropriate document in its O&M plan. The O&M plan must be revised as new practices are developed.

As part of proper operation and maintenance, the draft permit requires the City to develop a facility plan when the annual average flow exceeds 85 percent of the design flow of the plant (design flow 3.0 mgd x 85% = 2.6 mgd). This plan requires the City to develop a strategy for remaining in compliance with effluent limits in the permit.

C. Additional Permit Provisions

Sections II, III, and IV of the draft permit contain standard regulatory language that must be included in all NPDES permits. Because they are regulations, they cannot be challenged in the context of an NPDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

IX. OTHER LEGAL REQUIREMENTS

A. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with the National

Marine Fisheries Service and the U.S. Fish and Wildlife Service if their actions could adversely affect any threatened or endangered species. EPA has determined that issuance of this permit will not affect any of the endangered species in the vicinity of the discharge. See Appendix D for further details.

B. State Certification

Section 401 of the Clean Water Act requires EPA to seek state certification before issuing a final permit. As a result of the certification, the state may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with water quality standards.

C. Permit Expiration

This permit will expire five years from the effective date of the permit.

APPENDIX A
WASTEWATER TREATMENT PLANT LOCATION

APPENDIX B
WATER QUALITY STANDARDS

(A) Water Quality Criteria

In the vicinity of the discharge from the City of Sandpoint wastewater treatment plant, the following water quality criteria are necessary for the protection of the beneficial uses of the Pend Oreille River (Only portions of each section are reprinted here.):

1. IDAPA 58.01.02.200.02 - Surface waters of the State shall be free from toxic substances in concentrations that impair designated beneficial uses.

2. IDAPA 58.01.02.200.05 - Surface waters of the State shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses.

3. IDAPA 58.01.02.200.06 - Excess Nutrient. Surface waters of the State shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses.

4. IDAPA 58.01.02.200.08 - Sediment. Sediment shall not exceed quantities specified in section 250 and 252, or , in the absence of specific sediment criteria, quantities which impair designated beneficial uses. Determinations of impairment shall be based on water quality monitoring and surveillance and the information utilized as described in Section 350.

5. IDAPA 58.01.02.210.01 - Incorporation of National Toxic Rule. Toxic substance criteria set forth in 40 CFR 131.36(b)(1) (National Toxics Rule), as of July 1, 1993, is hereby incorporated by reference in the manner provided in subsection 210.02, however, the standard for arsenic shall be fifty (50) µg/l.

6. IDAPA 58.01.02.250.01.a. - Hydrogen ion concentration (pH) values within the range of 6.5 to 9.5 standard units.

7. IDAPA 58.01.02.250.01.c. - The one (1) hour average concentration of total residual chlorine shall not exceed nineteen (19) µg/L. The four (4) day average concentration shall not exceed eleven (11) µg/L.

8. IDAPA 58.01.02.250.02.a. - Dissolved oxygen concentrations shall exceed 6 mg/L at all times.

9. IDAPA 58.01.02.250.02.b. - Water temperatures of 22 degrees C or less with a maximum daily average of no greater than 19 degrees C.

10. IDAPA 58.01.02.250.02.c.i. - The one hour average concentration of un-ionized ammonia (as N) is not to exceed (0.43/A/B/2) mg/L, where:

    A = 1 if the water temperature (T) is $\geq$ 20°C, or
    A = $10^{(0.03(20-T))}$ if T < 20°C, and
    B = 1 if the pH is $\geq$ 8.0, or
    B = $(1+ 10^{(7.4-pH)}) \div 1.25$ if pH is < 8.0

11. IDAPA 58.01.02.250.02.c.ii - The four day average concentration of un-ionized ammonia (as N) is not to exceed (0.66A/B/C) mg/L, where:
    A = 1.4 if T is $\geq$ 15°C, or
    A = $10^{(0.03(20-T))}$ if T < 15°C, and
    B = 1 if the pH is $\geq$ 8.0, or
    B = $(1+ 10^{(7.4-pH)}) \div 1.25$ if pH is < 8.0
    C = 13.5 if pH is $\geq$ 7.7, or
    C = $20(10^{(7.7-pH)}) \div (1+ 10^{(7.4-pH)})$ if the pH is < 7.7

12. IDAPA 58.01.02.250.02.e.ii. - Salmonid spawning. Water temperatures of 13 degrees C or less with a maximum daily average no greater than 9 degrees C.

13. IDAPA 58.01.02.251.01.a.and b. - Primary Contact Recreation: Waters are not to contain E.coli bacteria exceeding: a single sample of 406 E.coli organisms per 110 ml, or, a geometric mean of 126 E.coli organisms per 100ml based on a minimum of 5 samples taken every 3-5 days over a 30 day period.

14. IDAPA 58.01.02.420.01.a. - Point Source Sewage Wastewater Discharge Restrictions. BOD - the equivalent of 85% removal of the biochemical oxygen demand, but not more than a 30 day average concentration of 30 mg/l.

15. IDAPA 58.01.02.420.01.b. - Point Source Sewage Wastewater Discharge Restrictions. Suspended Solids - the equivalent of 85% removal of the suspended solids, but not more than a 30 day average concentration of 30 mg/l.

16. IDAPA 58.01.02.420.05.a. - Fecal coliform concentrations in secondary treated effluent must not exceed a geometric mean of 200/100 ml based on no more than one week's data and a minimum of 5 samples.

(B) Anti-degradation Policy

The State of Idaho has adopted an anti-degradation policy as part of their water quality standards. The anti-degradation policy represents a three tiered approach to maintain and protect various levels of water quality and uses. The three tiers of protection are as follows:

- Tier 1 - Protects existing uses and the level of water quality necessary to protect those uses.

- Tier 2 - Protects the level of water quality necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water in waters that are currently of higher quality than required to support these uses. Before water quality in Tier 2 waters can be lowered , there must be an anti-degradation review consisting of: (1) a finding that it is necessary to accommodate important economic or social development in the area where the waters are located (2) full satisfaction of all intergovernmental coordination and public participation provisions; and (3) assurance that the highest statutory and regulatory requirements for point sources and best management practices for nonpoint sources are achieved. Furthermore, water quality may not be lowered to less than the level necessary to fully protect the "fishable/swimmable" uses and other existing uses.

- Tier 3 - Protects the quality of outstanding national resources, such as waters of national and State parks and wildlife refuges and waters of exceptional recreational or ecological significance. There may be no new or increased discharges to these waters and no new or increased discharges to tributaries of these waters that would result in lower water quality.

The Pend Oreille River is a Tier 1 waterbody, therefore, water quality should be such that it results in no mortality and no significant growth or reproductive impairment of resident species. An NPDES permit cannot be issued that would result in the water quality criteria being violated. The draft permit contains effluent limits which ensure that the existing beneficial uses for the Pend Oreille River will be maintained.

APPENDIX C
BASIS FOR EFFLUENT LIMITATIONS

The Clean Water Act (CWA) requires Publicly Owned Treatment Works to meet performance-based requirements (also known as technology based effluent limits) based on available wastewater treatment technology. EPA may find, by analyzing the effect of an effluent discharge on the receiving water, that technology based effluent limits are not sufficiently stringent to meet water quality standards. In such cases, EPA is required to develop more stringent, water quality-based effluent limits designed to ensure that water quality standards are met.

Furthermore, technology-based effluent limits don't always limit every parameter that is in an effluent. For example, technology-based effluent limits for POTWs only limit five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. Yet effluent from a POTW may contain other pollutants such as chlorine, ammonia, or metals depending on the type of treatment system used and the service area of the POTW (i.e., industrial facilities as well as residential areas discharge into the POTW). In these cases, where technology-based effluent limits do not exist for a particular pollutant, EPA must determine if the pollutants will cause or contribute to a violation of the water quality standards for the water body. If they do, EPA is required to develop water quality-based effluent limits designed to ensure that water quality standards are met.

The proposed effluent limits reflect whichever limits (technology-based or water quality-based) are more stringent. The following explains in more detail the derivation of technology-based effluent limits and water quality-based effluent limits. Part A discusses technology-based effluent limits, Part B discusses water quality-based effluent limits, and Part C compares the technology-based effluent limits with the water quality-based effluent limits, and shows the effluent limits that are proposed in the draft permit.

A. Technology-based Effluent Limitations

The CWA requires Publicly Owned Treatment Works to meet performance-based requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level, referred to as "secondary treatment," that all POTWs were required to meet by July 1, 1977. EPA developed "secondary treatment" regulations which are specified in 40 CFR 133. These technology-based effluent limits apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. The technology based effluent limits applicable to the City of Sandpoint are as follows:

1. 5 day Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS):

Average Monthly Limit =	30 mg/L
Average Weekly Limit =	45 mg/L
Percent Removal Requirements =	85 %

2. Federal regulations at (40 CFR § 122.45 (f)) require BOD_5 and TSS limitations to be expressed as mass based limits using the design flow of the facility (40 CFR § 122.45 (b)). The design flow of 3.0 mgd is taken from the NPDES permit application . The loading is calculated as follows: concentration X design flow X 8.34.

   BOD and TSS loading, monthly average = 30 mg/L X 3.0 mgd X 8.34 = 750 lbs/day
   BOD and TSS loading, weekly average = 45 mg/L X 3.0 mgd X 8.34 = 1100 lbs/day

3. The pH range shall be between 6.0 - 9.0 standard units.

4. Fecal Coliform Bacteria: In addition to the above, the Idaho *Water Quality Standards and Wastewater Treatment Requirements* (IDAPA16.01.02.420.05.a) require that fecal coliform concentrations in treated effluent not exceed a geometric mean of 200 colonies/100ml based on no more than one week's data and a minimum of five samples.

5. Total Residual Chlorine: EPA Region 10 policy is to include a limit for total residual chlorine in permits for facilities that use chlorine disinfection. A well-operated chlorination system should provide adequate disinfection over a 15-20 minute contact period while maintaining average monthly chlorine levels of less than 0.5 mg/L and average weekly chlorine concentrations at 0.75 mg/L.

Previous permits for this facility have allowed an exemption to the 85% removal requirement for BOD and TSS. The previous fact sheet states that the Sandpoint facility was granted a waiver of the 85% removal requirement on September 1, 1982, in accordance with 40 CFR 133.103(a). "This waiver was granted for wet weather flows contributed by the combined sanitary and storm sewer system." The previous fact sheet states that review of available data indicated that 85% removal of BOD and TSS was achievable when influent flows do not exceed 1.5 mgd. Therefore, the previous permit required 85% removal only when flows were below 1.5 mgd.

In the NPDES application the permittee indicated that the collection system is 95% separate sanitary sewer. The collection system is not a combined storm and sanitary sewer so the justification for the waiver from 85% removal is not consistent with the regulation. Federal regulation 40 CFR 133.103(d) does provide a waiver from the percent removal requirement for separate sewer with less concentrated influent provided the less concentrated influent is not the result of excessive inflow and infiltration (I/I). EPA has previously identified the City of Sandpoint's BOD and TSS noncompliance problems as being directly attributed to excessive I/I. Therefore, no waiver from the BOD or TSS 85% removal requirement is allowed for this facility.

The City of Sandpoint has made progress in mitigating I/I problems in recent years. The City recognizes that past violations are attributable to excessive I/I in the collection system. In correspondence with EPA, the City outlined steps they have taken to reduce I/I. Review of percent removal data shows that progress is being made. Percent removals reported on DMR's are typically above 90% for both BOD and TSS. Review of DMRs for the last two years show only one monthly average below the 85% requirement for each BOD and TSS (84% in each case).

In determining the BOD and TSS loadings allowed in the permit, EPA Region 10 uses facility design value as required by regulation (40 CFR § 122.45 (b)). The previous permit used a design value of 1.5 mgd to determine loadings. This was also the flow above which the 85% removal requirements was waived. Use of 1.5 mgd to determine allowable BOD and TSS loads is not consistent with federal regulations. The design value of 3.0 mgd, as reported in the NPDES application, is the appropriate value to use in calculating TSS and BOD loading limitations for this facility.

B. Water Quality-based Evaluation

1. Statutory Basis for Water Quality-Based Limits

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards by July 1, 1977. Discharges to state waters must also comply with limitations imposed by the state as part of its certification of NPDES permits under section 401 of the CWA.

The NPDES regulation (40 CFR 122.44(d)(1)) implementing section 301 (b)(1)(C) of the CWA requires that permits include limits for all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality."

The regulations require that this evaluation be made using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. The limits must be stringent enough to ensure that water quality standards are met, and must be consistent with any available wasteload allocation.

2. Reasonable Potential Determination

When evaluating the effluent to determine if water quality-based effluent limits are needed based on chemical specific numeric criteria, a projection of the receiving water concentration (downstream of where the effluent enters the receiving water) for each pollutant of concern is made. The chemical specific concentration of the effluent and ambient water and, if appropriate, the dilution available from the ambient water are factors used to project the receiving water concentration. If the projected concentration of the receiving water exceeds the numeric criterion for a specific chemical, then there is a reasonable potential that the discharge may cause or contribute to an excursion above the applicable water quality standard, and a water quality-based effluent limit is required (see Appendix B for the applicable water quality criteria).

As mentioned above, sometimes it is appropriate to allow a small area of ambient water to provide dilution of the effluent. These areas are called mixing zones. Mixing zone allowances will increase the mass loadings of the pollutant to the water body, and decrease treatment requirements. Mixing zones can be used only when there is adequate ambient flow volume and the ambient water is below the criteria necessary to protect designated uses.

3. Procedure for Deriving Water Quality-Based Effluent Limits

The first step in developing a water quality based permit limit is to develop a wasteload allocation (WLA) for the pollutant. A wasteload allocation is the concentration (or loading) of a pollutant that the permittee may discharge without causing or contributing to an exceedance of water quality standards in the receiving water. Wasteload allocations are determined in one of the following ways:

(a) TMDL-Based Wasteload Allocation

Where the receiving water quality does not meet water quality standards, the wasteload allocation is generally based on a TMDL developed by the State. A TMDL is a determination of the amount of a pollutant from point, non-point, and natural background sources, including a margin of safety, that may be discharged to a water body without causing the water body to exceed the criterion for that pollutant. Any loading above this capacity risks violating water quality standards. The state has completed a Subbasin Assessment for the Pend Oreille River and determined that TMDLs and wasteload allocations are not currently necessary for any parameters.

(b) Mixing Zone-Based Wasteload Allocation

When the State authorizes a mixing zone for the discharge, the WLA is calculated by using a simple mass balance equation. The equation takes into account the available dilution provided by the mixing zone, and the background concentrations of the pollutant.

(c) Criterion as the Wasteload Allocation:

In some cases a mixing zone cannot be authorized, either because the receiving water already exceeds the criteria or the receiving water flow is too low to provide dilution. In such cases, the criterion becomes the wasteload allocation. Establishing the criterion as the wasteload allocation ensures that the permittee will not contribute to an exceedance of the criteria.

Once the wasteload allocation has been developed, the EPA applies the statistical

permit limit derivation approach described in Chapter 5 of the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001, March 1991, hereafter referred to as the TSD) to obtain monthly average, and weekly average or daily maximum permit limits. This approach takes into account effluent variability, sampling frequency, and water quality standards.

4. Water Quality-Based Effluent Limits

(a) **Toxic Substances**

The Idaho state water quality standards require surface waters of the state to be free from toxic substances in concentration that impair designated uses. The City of Sandpoint has been conducting toxicity tests of its wastewater discharge twice a year since the last permit reissuance of 1993. With the exception of one test, all results have been identical over the past four years: the no-observed effects concentration (NOEC) has been 50% while the lowest-observed effects concentration (LOEC) has been "greater than 50%". The exception was in November 1999 when the NOEC was 25%. The dilutions used in the tests were: control, 2%, 4%, 10%, 25%, and 50% effluent. The existing permit established a toxicity trigger if toxicity was found at a dilution of 2% or less. Given the result that toxicity has not been detected at or below the trigger established in the permit, it is reasonable to reduce the frequency of whole effluent toxicity (WET) testing at this facility. The draft permit will require WET testing in the fourth year of the permit only so that the data will be available for permit reissuance at the end of the five year permit term. Testing will be conducted quarterly during the fourth year. A toxicity trigger shall be established based on available Pend Oreille River dilution. With a facility design flow of 3.0 mgd and a low flow river volume of 2123 mgd (7Q10 statistical flow), 25% of which is available for dilution, the dilution ratio is 0.6% effluent at the edge of the mixing zone. Should the WET testing in year 4 indicate toxicity in the effluent above the established trigger of 1% effluent, additional testing and a toxicity reduction evaluation will be required.

(b) **Floating, Suspended or Submerged Matter**

The Idaho state water quality standards require surface waters of the state to be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses. Therefore, the draft permit specifies that there shall be no discharge of floating solids or visible foam in other than trace amounts.

(c) **Excess Nutrients**

The Idaho state water quality standards require surface waters of the state be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses. This criteria is a narrative criteria versus a numeric criteria that exists for many toxic compounds. This portion of the Pend Oreille River has not been listed as water quality limited for nutrients and nuisance aquatic growth has not been reported. Therefore, limitations of nutrients are not included in this permit. If the narrative criteria was exceeded, EPA would use numeric protective values to develop effluent limitations. The numeric protective values for various nutrients are as follows: nitrate, 10 mg/L; nitrate + nitrite, 100 mg/L; total phosphorus, 0.1 mg/L. Nutrient monitoring conducted under the existing permit shows that the effluent concentration of nitrate and nitrite are below numeric protective levels. Maximum concentrations of phosphorus exceeds the total phosphorus protection level of 0.1 mg/L. Over the past five years total phosphorus has ranged from 0.4 to 7.8 mg/L. Given the high dilution available in the receiving water, it is unlikely that this facility contributes to in-stream phosphorus above protective levels. However, background or ambient levels of these nutrient in the vicinity of the facility is not known. The draft permit does not include limits since the applicable narrative nutrient criteria is being met, however, ambient monitoring will be initiated in order to study in-stream conditions to improve the understanding of the facility's contribution to nutrient levels in the Pend Oreille River. Facility nutrient monitoring will also continue so a full analysis of nutrient contribution can be conducted during the next permit issuance.

(d) **E. Coli Bacteria**

This portion of the Pend Oreille River is designated for primary contact recreation. As such, the waters are not to contain E. coli bacteria in concentrations exceeding: 1) a single sample of 406 E. coli organisms per 100 ml, and 2) a geometric mean of 126 E. coli organisms per 100ml based on a minimum of five samples taken every three to five days over a 30 day period. The daily and monthly limitations for fecal coliform in the existing permit were based on Idaho water quality standards which recently have been revised and replaced with the above E. coli limitations. The E. coli limits will, therefore, replace the daily and monthly fecal limits of the existing permit. The weekly fecal coliform limit is a Idaho technology-based standard as discussed previously and is retained in the draft permit along with the E. coli limitations.

(e) **pH**

The Idaho state water quality standards require surface waters of the state

that are designated for aquatic life use to have a pH value within the range of 6.5 - 9.5 standard units. The technology-based standards discussed previously require a pH of 6.0-9.0 standard units. Combining both requirements results in a pH limit of 6.5-9.0 standard units. The water quality criteria provides the most stringent lower end of the range while the technology standard provides the most stringent upper end of the pH range.

(f) **Total Residual Chlorine**

The existing permit established water quality based chlorine limits of 1.1 mg/L maximum daily and 0.45 mg/L average monthly. Recently, the facility has been in compliance with these limitations although chlorine compliance had been a problem at the facility prior to 1998. It appears the city has solved its chlorine compliance problems. Review of the chlorine limits with updated river flow data shows that the existing limits continue to be necessary in order to protect the receiving water for state chlorine water quality criteria. Updating the chlorine limitation calculation with current flow data (including use of a design flow of 3.0 mgd) does result in less stringent chlorine limitations, however, 40 CFR 122.44(l) requires limits of reissued permits to be at least as stringent as the limits of the previous permit. Therefore, no changes are proposed for the water quality based chlorine limits and the existing limits will be carried forward into the reissued permit.

(g) **Dissolved Oxygen**

The state water quality standards require the level of dissolved oxygen (D.O.) to exceed 6 mg/L at all times for water bodies that are protected for aquatic life use. The Pend Oreille River is not water quality limited for dissolved oxygen. According to the Subbasin Assessment, D.O. levels of 7.8 to 14.0 mg/L have been observed above the facility in Pend Oreille Lake. D.O. levels in the immediate vicinity of the facility are not known. Likewise, effluent data is limited, however, given the background levels in the Lake and the dilution provided by the river, it is highly unlikely that this municipal facility would cause D.O. levels below 6 mg/L in the receiving water. No DO limits are included in the proposed draft permit.

(h) **Ammonia**

IDEQ has developed water quality criteria to protect aquatic life against short term and long term adverse impacts from ammonia. Evaluation of ammonia toxicity requires a review of ambient pH and temperature data since the criteria are a function of these two parameters.

EPA reviewed the STORET data base to find ambient temperature and pH data. A number of upstream sites were found. The best site, based on number of observations, location, and time period, was a Pend Oreille Lake site, just upstream of City of Sandpoint where 130 samples were collected over 10 dates. EPA Region 10 uses the 95th percentile temperature and pH when developing upstream ammonia criteria in order to capture worst case conditions. The 95th percentile temperature was 21.8°C and the 95th percentile pH was 8.36. Using the tables of the Idaho Water Quality Standards, this results in a chronic ammonia criteria of 0.38 mg/L and an acute criteria of 2.09 mg/L. The chronic criterion protects against long term impacts to aquatic life, and the acute criterion protects against short term impacts.

In order to evaluate the facilities impact on ammonia levels in the receiving water, background concentration must also be determined. EPA again searched the STORET data base and found a few data sets where ammonia was determined. The most appropriate set (22 measurements, 1984-1990) showed an ammonia range of 0.001 to 0.101 mg/L with a 95th percentile value of 0.09 mg/L.

With the ammonia criteria and background determined, the following reasonable potential analysis was conducted. The analysis is done to determine whether this facility has a reasonable potential to contribute to or cause exceedances of the ammonia criteria and whether limitations are necessary.

When evaluating the effluent to determine if a water quality based effluent limit (WQBEL) is needed based on chemical specific numeric criteria, a projection of the receiving water concentration (downstream of where the effluent enters the receiving water) for the pollutant of concern is made. If the projected concentration of the receiving water exceeds the applicable numeric criterion, then there is a reasonable potential that the discharge may cause or contribute to an excursion above the applicable water quality standards, and a WQBEL is required.

The following mass balance equation is used to determine the downstream receiving water concentration:

$$C_d = \frac{(C_e \text{ X } Q_e) + (C_u \text{ X } (Q_u \text{ X } \%MZ))}{Q_e + (Q_u \text{ X } \%MZ)}$$

where,
C_d = receiving water concentration downstream of the effluent discharge
C_e = maximum projected effluent concentration
Q_e = maximum effluent flow = 3.0 mgd (design value)

C_u = upstream concentration of pollutant
Q_u = upstream flow, 7Q10 flow for chronic = 2,123 mgd
1Q10 flow for acute = 1,482 mgd
%MZ = assume 25 percent mixing zone is authorized by the IDEQ

When determining the projected receiving water concentration, EPA's *Technical Support Document for Water Quality-based Toxics Controls* (TSD, 1991) recommends using the maximum projected effluent concentration. To determine the maximum projected effluent concentration (C_e) EPA has developed a statistical approach to better characterize the effects of effluent variability. The approach combines knowledge of effluent variability as estimated by a coefficient of variation (CV) with the uncertainty due to a limited number of data to project an estimated maximum concentration for the effluent. Once the CV has been calculated, the reasonable potential multiplier used to derive the maximum projected effluent concentration (C_e) can be found in Table 3-1 of EPA's TSD. A reasonable potential multiplier may vary from a low of 1 to 368.

The maximum projected concentration (C_e) for the effluent is equal to the highest observed concentration value of the data set multiplied by the reasonable potential multiplier. Data from the last 5 years was used to determine the maximum projected concentration. The highest value of 16.4 mg/L was measured in June 2000. The CV for the 5-year data set is 0.5. The resultant reasonable potential multiplier is 2.0. The maximum projected concentration (C_e) is 32.8 mg/L (16.4 mg/L X 2.0).

The downstream receiving water concentration $(C_d)_{chronic}$ is:

$$C_d = \frac{(C_e \text{ X } Q_e) + (C_u \text{ X } (Q_u \text{ X } \%MZ))}{Q_e + (Q_u \text{ X } \%MZ)}$$

$$C_d = \frac{(32.8 \text{ X } 3.0) + (0.09 \text{ X } (2{,}123 \text{ X } 0.25)}{3.0 + (2{,}123 \text{ X } 0.25)} = \frac{146}{534} = 0.27 \text{ mg/L}$$

The projected downstream concentration of 0.27 mg/L is less than the chronic criteria of 0.38 mg/L.

The downstream receiving water concentration $(C_d)_{acute}$ is:

$$C_d = \frac{(C_e \text{ X } Q_e) + (C_u \text{ X } (Q_u \text{ X } \%MZ))}{Q_e + (Q_u \text{ X } \%MZ)}$$

$$C_d = \frac{(32.8 \text{ X } 3.0) + (0.09 \text{ X } (1{,}482 \text{ X } 0.25)}{3.0 + (1{,}482 \text{ X } 0.25)} = \frac{132}{374} = 0.35 \text{ mg/L}$$

The projected downstream concentration of 0.35 mg/L is less than the chronic criteria of 2.09 mg/L.

Since the projected downstream receiving water concentration is less than the chronic and acute criteria, no ammonia limitation is required to be developed for this discharge.

(i) **Metals**

The Idaho Department of Environmental Quality has developed water quality criteria to protect aquatic life against adverse impact from metals. Some of the metals criteria are a function of the hardness of the receiving water as measured in mg/L calcium carbonate. As the hardness of the receiving water increases, the toxicity decreases. EPA uses the 5th percentile in-stream hardness value when determining metal criteria. EPA searched the STORET data base and found a Lake Pend Oreille site with 19 hardness values collected between 1984-1987. The 5th percentile hardness from this data set is 67 mg/L and the corresponding metals criteria are listed in Table C-1.

The following metals are monitored twice per year as part of the pretreatment program requirements of the existing NPDES permit: arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, and zinc. A reasonable potential calculation for each metal was completed following the same procedure as ammonia above. The results of the analysis are shown in Table C-1. The analysis found the discharge from the Sandpoint facility has no reasonable potential to cause or contributes to exceedance of the State's water quality criteria for any metal. Metals monitoring twice per year will continue as a requirement of the pretreatment program.

(j) **Temperature**

The Idaho Water Quality Standards require ambient water temperatures of 22ºC or less with a maximum daily average of no greater than 19ºC. The Pend Oreille River is water quality limited for thermal modification. The Subbasin Assessment indicates temperature levels have not exceeded 22ºC, although the maximum level has been 21.4ºC. The Subbasin Assessment does not include a temperature TMDL; the State is deferring temperature TMDLs until the current standards are determined to be appropriate to protect aquatic life or new standards are developed.

With the dilution provided by the River, the discharge from Outfall 001 is unlikely to contribute to exceedances of the temperature criteria, although

limited effluent data exists to evaluate the impact. Temperature limits are not included in the draft permit. The draft permit does, however, add the requirement to monitor temperature at Outfall 001. This temperature data can then be used to establish future effluent limitations during the next permit reissuance or when a temperature TMDL is prepared.

Table C-1: Reasonable Potential Evaluation - Metals								
Parameter	**Maximum Reported Conc**	**Number of Samples**	**CV**	**Reasonable Potential Multiplier**	**Maximum Projected Effluent Conc (C_e)**	**Projected Downstream Conc (C_d)**	**Most Stringent Criterion**	**Reasonable Potential to Exceed?**
Cadmium, µg/l	0.7	18	0.6	2.4	1.7	.02	0.77	NO
Chromium, µg/l	nd*	18	—	—	—	—	128	NO
Copper, µg/l	20	18	.34	1.6	32	.29	8.06	NO
Lead, µg/l	4	18	0.6	2.4	9.6	.09	1.62	NO
Mercury, µg/l	nd	18	---	---	---	---	.012	NO
Nickel, µg/l	4	18	0.6	2.4	9.6	.09	112	NO
Silver, µg/l	2	18	0.6	2.4	4.8	0.04	1.73	NO
Zinc, µg/l	152	18	.43	1.8	274	2.4	74.4	NO
Arsenic, µg/l	nd	18	—	—	—	—	190	NO
Cyanide, µg/l	nd	18	---	---	---	---	5.2	NO
Selenium, µg/l	nd	18	---	---	---	---	5	NO
* nd = non-detect. For these parameters all samples were reported as being below the detection limit of the analytical method.								

C. Comparison of technology-based effluent limits and water quality-based effluent limits

The following table compares the technology-based effluent limits with the water quality-based effluent limits. The proposed effluent limits in the draft permit are the more stringent of the two types of limits.

Table C-2. Proposed Effluent Limitations

Parameter	Technology-based Effluent Limits				Water quality-based Effluent Limits				Proposed Effluent Limits in Draft Permit			
	AML	AWL	IML	range	AML	AWL	IML	range	AML	AWL	IML	range
BOD_5	30 mg/L	45 mg/L	---	---	---	---	---	---	30 mg/L	45 mg/L	---	---
	750 lbs/day	1100 lbs/day			---	---			750 lbs/day	1100 lbs/day		
BOD_5, Percent Removal	85	---	---	---	---	---	---	---	85	---	---	---
TSS	30 mg/L	45 mg/L	---	---	---	---	---	---	30 mg/L	45 mg/L	---	---
	750 lbs/day	1100 lbs/day			---	---			750 lbs/day	1100 lbs/day		
TSS, Percent Removal	85	---	---	---	---	---	---	---	85	---	---	
Fecal Coliform Bacteria	---	200/100 ml	---	---	---	---	---	---	---	200/100 ml	---	---
E.Coli Bacteria	---	---	---	---	126/100 ml	---	406/100 ml	---	126/100 ml	---	406/100 ml	
Total Residual Chlorine	0.5 mg/L	0.75 mg/L	---	---	0.45 mg/L	---	1.1 mg/L	---	0.45 mg/L	---	1.1 mg/L	
pH	---	---	---	6.0-9.0	---	---	---	6.5-9.5	---	---	---	6.5-9.0

AML means Average Monthly Limit
AWL means Average Weekly Limit
IML means Instantaneous Maximum Limit
--- means no limit

APPENDIX D
ENDANGERED SPECIES ACT

Section 7 of the Endangered Species Act (ESA) requires federal agencies to request a consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service regarding potential effects an action may have on listed endangered species.

In a letter dated July 24, 2000, the U.S. Fish and Wildlife Service identified the gray wolf as being a federally-listed endangered species and the bald eagle and bull trout as federally listed threatened species in the vicinity of the District's discharge. The westslope cutthroat trout was also identified as a species of concern. The National Oceanic and Atmospheric Administration, National Marine Fisheries Service did not identify any additional species within the area of the discharge.

EPA has determined that the requirements contained in the draft permit will not have an impact on the gray wolf, bald eagle, bull trout, or westslope cutthroat trout. Hunting and habitat destruction unrelated to wastewater treatment facility operations are the primary causes of the gray wolf's decline. Specific threats to bald eagles identified by the U.S. Fish and Wildlife Service include logging, overgrazing of cottonwood saplings, agricultural development, lowered food supply, pesticide contamination, hydroelectric dams, shooting, recreation-related human disturbance, use of strychnine, and possible lead poisoning. None of these threats are related to the discharge from the wastewater treatment facility. For the bulltrout and westslope cutthroat trout, the draft permit specifically ensures compliance with Idaho Water Quality Standards.